



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,161	11/21/2003	Howard G. Pinder	A-9495	2359

5642 7590 01/27/2005

SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PARKWAY  
LAWRENCEVILLE, GA 30044

EXAMINER

CHAI, LONGBIT

ART UNIT PAPER NUMBER

2131

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



**Office Action Summary**

Application No.

10/719,161

Applicant(s)

PINDER ET AL.

Examiner

Longbit Chai

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/12/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.



## DETAILED ACTION

### *Priority*

1. Applicant's claims for benefit of Continuation-in-part of Application priority date under 35 U.S.C. 120 is acknowledged.

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The application is filed on 11/21/2003 but all of the claims 1 – 12 are not solely directed to originally supported subject matter present in the parent application (for example, related to paragraph [0041] – [0043] that is newly disclosed in the present application).

However, the later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

As a result, all of the claims 1 – 12 will not receive benefit of the filing date of the earlier file application, and thereby the effective filing date for the subject matter defined in the pending claims in this application remains 11/21/2003.



***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Unger (Patent Number: 2003/0026423), hereinafter referred to as Unger.

As per claim 1, Unger teaches a method for receiving a program in a dual-encrypted stream by a plurality of set-tops, the plurality of set-tops for decrypting one of a first encryption stream and a second encryption stream, the method comprising the step of:

transmitting a program association table including a plurality of programs, wherein each program has two program numbers, wherein a first program number is associated with a first program map table for the first encryption stream and a second program number is associated with a second program map table for the second encryption stream (Unger, see for example, Paragraph [0048] – [0050] and Paragraph [0058]);



wherein the plurality of set-tops retrieve packets associated with a desired program via one of the first program map table and the second program map table (Unger, see for example, Paragraph [0048] – [0050], Paragraph [0056] – [0065] and Paragraph [0096]).

As per claim 2, Unger teaches the claimed invention as described above (see claim 1). Unger further teaches the first program map table includes a plurality of program identifiers for the first encryption stream, and wherein the second program map table includes the plurality of program identifiers for the first encryption stream and a plurality of program identifiers for the second encryption stream (Unger, see for example, Paragraph [0048] – [0050] and Paragraph [0056] – [0068]).

As per claim 3, Unger teaches the claimed invention as described above (see claim 1). Unger further teaches the first program map tables includes a plurality of packet identifiers for one of the first encryption stream and a clear stream, and wherein the second program map tables includes the plurality of packet identifiers for one of the first encryption stream and the clear stream and a plurality of packet identifiers for the second encryption stream (Unger, see for example, Paragraph [0048] – [0050], [0060], [0064] – [0065] and Paragraph [0096]).

As per claim 4, Unger teaches the claimed invention as described above (see claim 3). Unger further teaches a set-top for decrypting the second encryption stream



retrieves the packets associated with the desired program via the second program map table, wherein a packet identifier is associated with one of the second encryption stream and the clear stream (Unger, see for example, Paragraph [0048] – [0050], [0092], and Paragraph [0096]).

As per claim 5, Unger teaches a method for receiving a clear transport stream and for providing an encrypted transport stream, the clear stream including a plurality of programs, each program comprising a plurality of packets each having a packet identifier (PID), the method comprising the steps of:

scrambling the clear transport stream according to a first encryption method to provide a first encryption program (Unger, see for example, Paragraph [0096]);

scrambling the clear transport stream according to a second encryption method to provide a second encryption program (Unger, see for example, Paragraph [0096]);

passing packets of the clear transport stream to a multiplexer, wherein when at least one critical packet is identified in the packets of the clear transport stream, the critical packet of the clear stream drops and the scrambled critical packets included in the first and second encryption programs pass to the multiplexer (Unger, see for example, Paragraph [0056] – [0068], [0092], and Paragraph [0096]: This is equivalent to the “insert” function); and

multiplexing the passed packets of the clear transport stream and the critical packets of the first and second encryption programs to provide a partial dual-encrypted stream (Unger, see for example, Paragraph [0080], [0068], [0056] – [0068], [0092], and



Art Unit: 2131

Paragraph [0096]),

wherein a program association table is provided along with the partial dual-encrypted stream indicating a plurality of first program numbers associated with the critical packets of the first encryption stream and a plurality of second program numbers for the passed packets of the clear stream and the critical packets of the second encryption stream (Unger, see for example, Paragraph [0048] – [0050], [0080], [0068], [0056] – [0068], [0092], and Paragraph [0096]).

As per claim 6, Unger teaches the claimed invention as described above (see claim 5). Unger further teaches each of the plurality of second program numbers indicates a program map table, wherein the program map table includes packet identifiers identifying the critical packets of the first and second encryption programs and the passed packets of the clear transport stream (Unger, see for example, Paragraph [0048] – [0050], [0056] – [0068], [0080], [0092], and Paragraph [0096]).

As per claim 7, Unger teaches the claimed invention as described above (see claim 6). Unger further teaches remapping at least one PID value associated with the second encryption program, whereby the scrambled packets of the first and second encryption programs each have a differing PID value, wherein the different PID values are reflected in the program map table associated with each of the plurality of second program numbers (Unger, see for example, Paragraph [0085] and Figure 6 Element 324 & 330).



As per claim 8, Unger teaches the claimed invention as described above (see claim 5). Unger further teaches the first program map tables includes a plurality of packet identifiers for one of the first encryption stream and a clear stream, and wherein the second program map tables includes the plurality of packet identifiers for one of the first encryption stream and the clear stream and a plurality of packet identifiers for the second encryption stream (Unger, see for example, Paragraph [0048] – [0050], [0056] – [0068] and Paragraph [0096]).

As per claim 9, Unger teaches a method for receiving a clear transport stream and for transmitting an encrypted transport stream, the clear transport stream including a plurality of programs, each program comprising at least one elementary stream, the at least one elementary stream comprising a plurality of packets each having a packet identifier (PID), the method comprising the steps of:

scrambling with a first scrambler a first clear transport stream according to a first encryption method to provide a first encrypted program (Unger, see for example, Paragraph [0096]);

identifying a critical packet associated with a second clear transport stream, wherein prior to identification, the second clear transport stream is allowed to pass and the first encrypted program drops, and wherein subsequent to identification, the identified critical packet associated with the first encrypted program passes to a multiplexer, and the identified critical packet associated with the second clear transport



stream is provided to a second scrambler (Unger, see for example, Figure 8 & Paragraph [0068], [0096], [0048] – [0050] and [0056] – [0067]);

scrambling the critical packet associated with the second clear transport stream according to a second encryption method to provide a second encrypted program, wherein the second encrypted program is provided to the multiplexer (Unger, see for example, Paragraph [0096], [0048] – [0050] and [0056] – [0068]); and

multiplexing non-critical packets associated with the second clear transport stream and the encrypted critical packets associated with the first and second encrypted programs to provide a partial dual-encrypted stream (Unger, see for example, Paragraph [0068], [0096], [0048] – [0050] and [0056] – [0068]),

wherein a program association table is provided along with the partial dual-encrypted stream indicating a plurality of first program numbers associated with the critical packets associated with the first encrypted program and a plurality of second program numbers associated with the non-critical packets associated with the second clear transport stream and the critical packets associated with the second encrypted program (Unger, see for example, Paragraph [0068], [0048] – [0050], [0056] – [0068] and Paragraph [0096]).

As per claim 10, Unger teaches the claimed invention as described above (see claim 9). Unger further teaches each of the plurality of second program numbers indicates a program map table, wherein the program map table includes packet identifiers identifying the critical packets associated with the second encrypted program



Art Unit: 2131

(Unger, see for example, Paragraph [0068], [0048] – [0050], [0056] – [0068] and Paragraph [0096]).

As per claim 11, Unger teaches the claimed invention as described above (see claim 10). Unger further teaches remapping at least one PID value associated with the second encrypted program, whereby the scrambled packets of the first and second encrypted programs each have a differing PID value, wherein the different PID values are reflected in the program map table associated with each of the plurality of second program numbers (Unger, see for example, Paragraph [0085] and Figure 6 Element 324 & 330).

As per claim 12, Unger teaches the claimed invention as described above (see claim 10). Unger further teaches a set-top for decrypting the second encrypted program retrieves packets determined by the program map table associated with one of the plurality of second program numbers, wherein a packet identifier is associated with one of the critical packets of the second encrypted program and the non-critical packets of the clear transport stream (Unger, see for example, Paragraph [0048] – [0050], [0056] – [0068] and Paragraph [0096]).



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai  
Examiner  
Art Unit 2131

LBC



ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER